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13 ABSTRACT (Maximum 200 words) <p>Assessing the risk of impact to natural ecosystems from xenobiotic compounds requires an accurate characterization of the threatened ecosystem, direct measures or estimates of environmental exposure, and a comprehensive evaluation of the biological effects from actual and potential contamination. Field and laboratory methods have been developed to obtain direct measures of environmental health. These methods have been implemented in monitoring programs to assess and verify the ecological risks of contamination from past events, such as hazardous waste disposal sites, as well as future scenarios, such as the environmental consequences from the use of biocides in antifouling bottom paints for ships.</p> <p>The sampling designs and rationale used for three ecological risk assessment case studies are presented and discussed. The case studies presented are: (1) a risk assessment of the impact to shellfish, sediments, and water quality of Narragansett Bay from a hazardous waste landfill located at the Naval Construction Battalion Center Davisville, RI; (2) a risk assessment of the impact to terrestrial and aquatic wildlife from past hazardous waste disposal practices at Naval Air Station Whidbey Island, WA; and (3) a risk assessment of the impact to marine organisms from the use of organotin antifouling bottom paints. The ability to use appropriate assessment techniques to provide a framework for interpreting and predicting potential adverse impacts is stressed and the conclusions drawn from the case studies are evaluated. The benefits of conducting ecological risk assessments are identified and the shortcomings and research needs are also discussed.</p> <p>Published in <i>Proceedings of the Western Society of Naturalists</i>, Dec 1990.</p>			
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Abstract For:
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Concepts in Ecological Risk Assessment

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Assessing the risk of impact to natural ecosystems from xenobiotic compounds requires an accurate characterization of the threatened ecosystem, direct measures or estimates of environmental exposure, and a comprehensive evaluation of the biological effects from actual and potential contamination. Field and laboratory methods have been developed to obtain direct measures of environmental health. These methods have been implemented in monitoring programs to assess and verify the ecological risks of contamination from past events, such as hazardous waste disposal sites, as well as future scenarios, such as the environmental consequences from the use of biocides in antifouling bottom paints for ships.

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